ODS 449

OBSTRUCTION DATA SHEET

ODS 449
PALM BEACH INTERNATIONAL AIRPORT
PALM BEACH, FLORIDA

DIGITIZED FROM

OC 449
SURVEYED JANUARY 1989
10TH EDITION

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THE NATIONAL OCEAN SERVICE
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FOR THE FEDERAL AVIATION ADMINISTRATION

C 55.411/3:

OBSTRUCTION DATA SHEET

The Obstruction Data Sheet (ODS) provides digital obstruction and runway data for use in aircraft arrival and departure planning. This information has been obtained using field survey and photogrammetric methods by the Photogrammetry Branch of the National Ocean Service in accordance with Federal Aviation Regulations Part 77 (FAR-77), "Objects Affecting Navigable Airspace" and FAA Nr. 405, "Specifications - Airport Obstruction Chart and Related Products."

The ODS is a derivative of the Airport Obstruction Chart (OC). The source OC is indicated on the ODS cover. All objects, both obstructing and nonobstructing, that carry an elevation on the OC are listed in the ODS. The ODS (and OC) depict a representation of objects that existed at the time of the OC field survey.

ODS information is arranged as follows:

1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the physical end and threshold of Runway 9R. Objects in the Runway 27L approach or primary are listed with Runway 27L. (Objects in the common 9R/27L primary area are listed with both runways.)

2. All objects not included in "1" above are listed with the Airport Reference Point (ARP).

3. Runway configuration and runway lengths, widths, and elevations are presented on the ODS last page.

The FAR-77 imaginary approach surfaces for which the obstruction surveys were performed are coded in the ODS as follows (see footnote 2 on page 3):

A(V) ..... Utility runway - visual approach only
A(NP) .... Utility runway - nonprecision instrument approach
B(V) ..... Nonutility runway - visual approach only
C .... Nonutility runway - nonprecision instrument approach with visibility minimums greater than 3/4 mile
D .... Nonutility runway - nonprecision instrument approach with visibility minimums as low as 3/4 mile
PIR ..... Precision instrument runway
SUPLC ... Supplemental C underlying a B(V)

FAR-77 imaginary surface dimensions are defined on page 2 of this report.

Primary surface width is determined by the widest approach at the two approach/primary interfaces for that runway.

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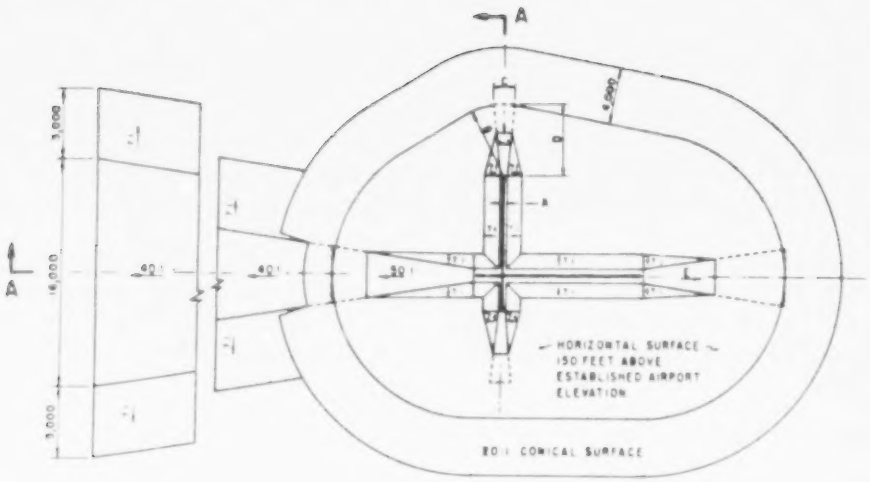
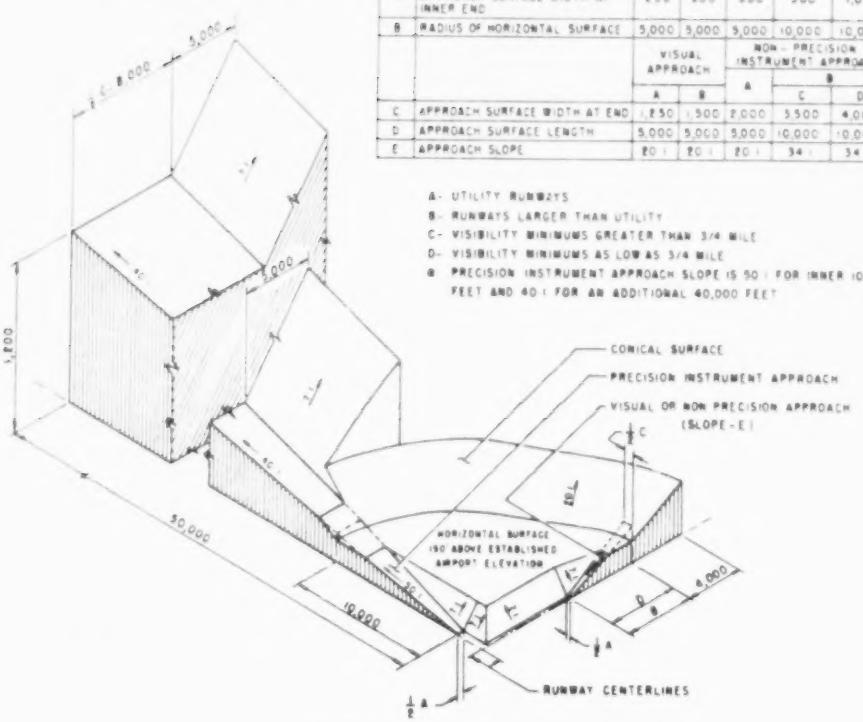


DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B		
					C	D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	B		
					C	D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	@
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	*

A- UTILITY RUNWAYS
B- RUNWAYS LARGER THAN UTILITY
C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
@ PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET



ISOMETRIC VIEW OF SECTION A-A

FAR-77 CIVIL AIRPORT
IMAGINARY SURFACES

ANNOTATION OF ODS DATA FORMAT

OC XXXX

AIRPORT ELEVATION XXXX

X^{1} X^{2} XXXX/XXXX^{3} XXXXXX.XXX^{4} XXXXXXX.XXX^{4} XXXXXXX^{5} XXXX/XXXX^{6} XXXXXX.XXX^{7} XXXXXXX.XXX^{7}

OBJECT	LAT	LONG	A[8]	ELEV[9]	AGL[10]	HAR[11]	HAT[11]	HAA[11]	DEND[12]	DTHR[12]	DCLN[12]	PNTR[13]
XXXXXXXXXX	XXXXXX.XXX	XXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX
XXXXXXXXXX	XXXXXX.XXX	XXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX

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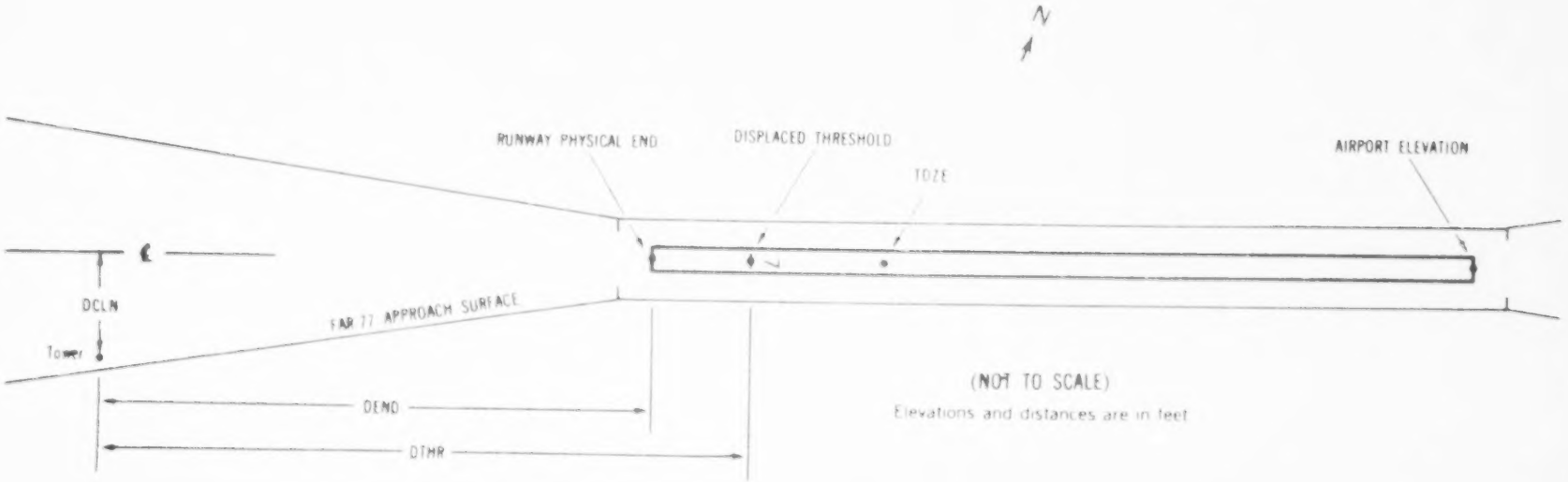


(NOT TO SCALE)

Elevations and distances are in feet

EXPLANATION OF FOOTNOTES

[1] Data block identifier. If a runway number is entered (reference runway), this data block will contain data pertinent to the reference runway and to objects in the FAR-77 approach and primary area of the reference runway. If ARP is entered, this data block will contain the ARP position and data relative to all objects not in an FAR-77 approach or primary area.

[2] For the reference runway, the lowest FAR-77 approach surface for which an obstruction survey was performed. (More than one surface may be surveyed.)

[3] Reference runway approach physical end elevation/touchdown zone elevation

[4] Latitude and longitude of reference runway approach physical end

[5] Reference runway geodetic azimuth reckoned clockwise from south

[6] Reference runway displaced threshold elevation/touchdown zone elevation

[7] Latitude and longitude of reference runway displaced threshold

[8] Accuracy Code:

Horizontal	Vertical
1 = 20	A = 2
2 = 40	B = 5
	C = 20

[9] Mean Sea Level (MSL) elevation at top of object. This value includes 15 feet added to noninterstate roads, 17 feet added to interstate roads, and 23 feet added to railroad tracks.

[10] Height above ground level (AGL). AGLs are provided only for those objects appearing on the OC that are equal to, or greater than, 200 feet AGL. AGL accuracy is ±10 feet.

[11] HAA - Height above airport
HAR - Height above reference runway approach physical end
HAT - Height above reference runway touchdown zone elevation

[12] DEND - Distance along reference runway centerline from point perpendicular to object to reference runway approach physical end
DTHR - Distance along reference runway centerline from point perpendicular to object to reference runway threshold
DCLN - Distance left (L) or right (R) of reference runway centerline as observed facing forward in a landing aircraft.

A negative value for DEND or DTHR indicates object is in primary area on roll-out side of zero distance point.

[13] PNTR - Penetration of indicated FAR-77 approach or primary surface (see footnote 2).

OC0449

AIRPORT ELEVATION 19

9L PIR 16/17 264057.740N 0800617.794W 2724609

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
OL ON LIGHTED WINDSOCK	264051.89	0800500.87	1A	40		24	23	21	-6999		252R	21
OL ON LIGHTED WINDSOCK	264051.62	0800553.84	1A	39		23	22	20	-2201		512R	22
ROD ON OL TRANSMISSOMTR	264052.69	0800602.64	1A	32		16	15	13	-1398		443R	16
OL ON LIGHTED WINDSOCK	264054.67	0800604.18	1A	39		23	22	20	-1249		250R	23
ROD ON OL GLIDE SLOPE	264053.31	0800607.00	1A	58		42	41	39	-1000		400R	42
APPROACH LIGHT	264058.77	0800642.03	1A	44		28	27	25	2201		2R	-12
POLE	264050.60	0800643.60	1A	53		37	36	34	2303		833R	-5
SIGN	264100.48	0800645.06	1A	61		45	44	42	2484		156L	-1
TREE	264055.96	0800646.54	1A	66		50	49	47	2596		306R	2
TREE	264050.76	0800646.91	1A	65		49	48	46	2604		832R	1
TREE	264053.23	0800646.98	1A	72		56	55	53	2623		582R	8
TREE	264054.83	0800647.57	1A	70		54	53	51	2684		424R	4
TREE	264103.71	0800648.13	1A	79		63	62	60	2778		469L	11
TREE	264057.68	0800652.08	1A	80		64	63	61	3106		156R	6
MIDDLE MARKER	264059.10	0800657.71	1A	30		14	13	11	3623		38R	-54

27R C 19/19 264053.910N 0800449.825W 0924649

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
ROD ON OL GLIDE SLOPE	264053.31	0800607.00	1A	58		39	39	39	-6989		400L	42
OL ON LIGHTED WINDSOCK	264054.67	0800604.18	1A	39		20	20	20	-6740		250L	23
ROD ON OL TRANSMISSOMTR	264052.69	0800602.64	1A	32		13	13	13	-6591		443L	16
OL ON LIGHTED WINDSOCK	264051.62	0800553.84	1A	39		20	20	20	-5789		512L	22
OL ON LIGHTED WINDSOCK	264051.89	0800500.87	1A	40		21	21	21	-990		252L	21
ROD ON BUILDING	264050.22	0800434.44	1A	29		10	10	10	1412		305L	-26
OL LOCALIZER	264053.23	0800434.26	1A	20		1	1	1	1414		0L	-35

OC0449

AIRPORT ELEVATION 19

9R A(V) 19/19 264051.039N 0800623.217W 2724732

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	264049.92	0800639.80	1A	80		61	61	61	1497		186R	-4
POLE	264050.60	0800643.60	1A	53		34	34	34	1845		135R	-48
TREE	264050.76	0800646.91	1A	65		46	46	46	2145		133R	-51
TREE	264053.23	0800646.98	1A	72		53	53	53	2164		116L	-45
TREE	264054.83	0800647.57	1A	70		51	51	51	2225		275L	-50

27L A(V) 15/18 264049.517N 0800548.509W 0924747

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
VORTAC	264046.95	0800512.25	1A	52		37	34	33	3298		98L	-118
OL ON LIGHTED WINDSOCK	264051.89	0800500.87	1A	40		25	22	21	4305		451R	-180

13 C 19/19 264129.367N 0800615.330W 3151045

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
ROAD (N)	264037.29	0800521.85	1A	32		13	13	13	-7149		265R	15
OL ON LIGHTED WINDSOCK	264044.83	0800529.86	1A	39		20	20	20	-6097		244R	22
TREE	264137.06	0800627.65	1A	54		35	35	35	1338		245R	2
TREE	264142.15	0800626.66	1A	58		39	39	39	1640		181L	-3
TREE	264139.91	0800631.80	1A	58		39	39	39	1808		309R	-8
TREE	264139.96	0800635.26	1A	101		82	82	82	2033		529R	28
TREE	264142.72	0800633.63	1A	81		62	62	62	2126		227R	5
TREE	264142.78	0800635.55	1A	74		55	55	55	2253		346R	-5

OC0449

AIRPORT ELEVATION 19

31 C 17/ 264040.680N 0800521.479W 1351110 17/17 264043.617N 0800524.726W

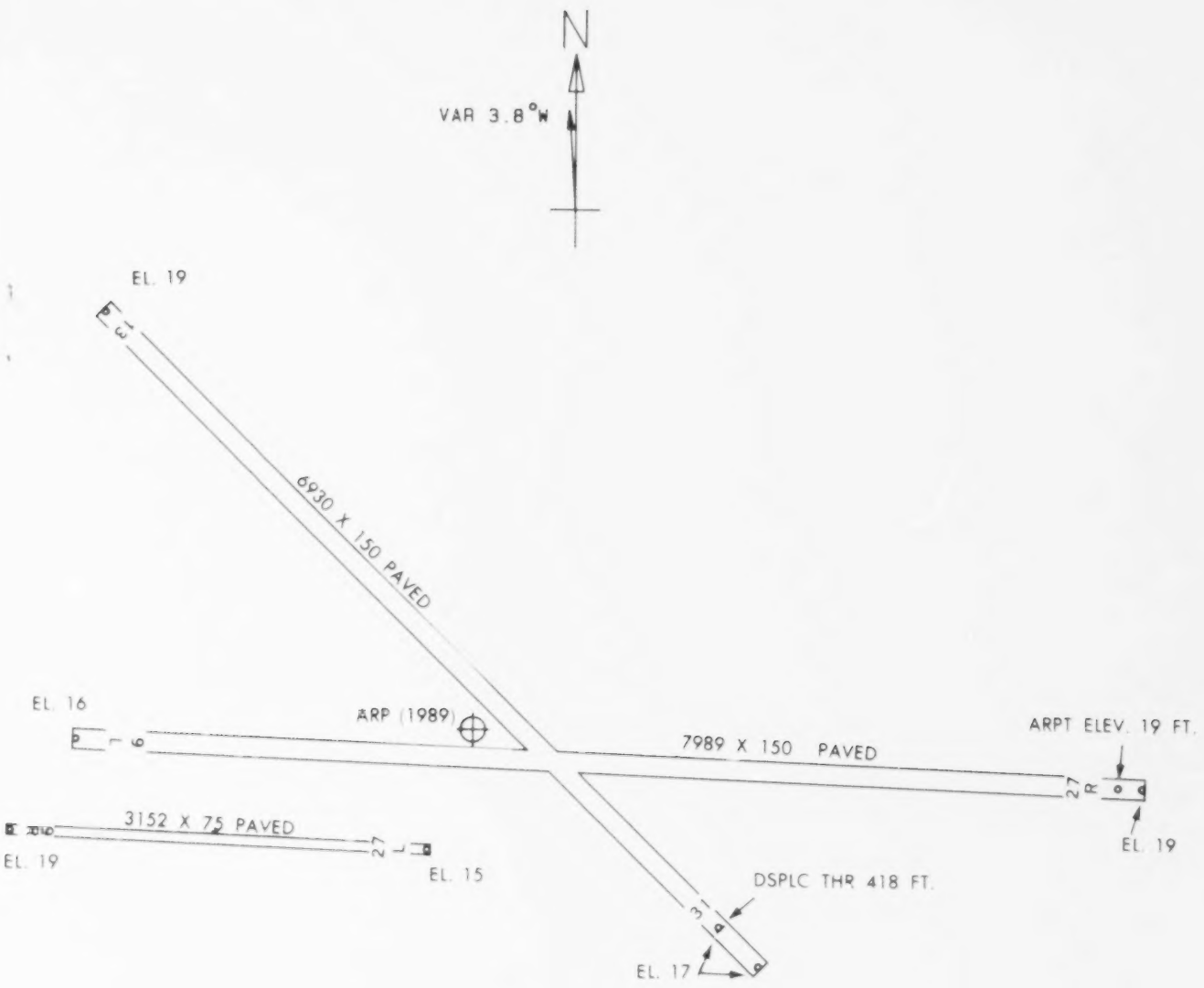
OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
OL ON LIGHTED WINDSOCK	264044.83	0800529.86	1A	39		22	22	20	-833	-415	244L	22
ROAD (N)	264037.29	0800521.85	1A	32		15	15	13	219	637	265L	15
ROAD (N)	264036.89	0800517.24	1A	37		20	20	18	542	960	3R	10
BUSH	264035.83	0800518.02	1A	36		19	19	17	569	987	123L	8
TRAFFIC SIGNAL POLE	264036.29	0800516.23	1A	40		23	23	21	650	1068	25R	10
TREE	264032.49	0800516.70	1A	48		31	31	29	892	1310	275L	11
TREE	264035.54	0800511.34	1A	49		32	32	30	1017	1435	286R	8
TREE	264032.36	0800514.36	1A	63		46	46	44	1051	1469	134L	21
TREE	264029.15	0800514.79	1A	60		43	43	41	1254	1672	390L	12
TREE	264030.55	0800506.70	1A	76		59	59	57	1671	2089	230R	16
TREE	264027.56	0800509.71	1A	84		67	67	65	1692	2110	177L	23
TREE	264026.92	0800504.88	1A	75		58	58	56	2047	2465	89R	4
TREE	264023.95	0800506.69	1A	74		57	57	55	2144	2562	239L	0

OC0449

AIRPORT ELEVATION 19

ARP 264058.386N 0800544.997W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
ANTENNA ON HANGAR	264044.97	0800546.40	1A	59		40	189 10	1361
ROD ON POLE	264104.75	0800601.51	1A	40		21	297 1	1630
ANTENNA ON OL CONTROL TR	264041.60	0800558.28	1A	123		104	219 12	2080
OL ON APT BEACON ON TANK	264122.02	0800541.70	1A	159		140	10 57	2405
ANTENNA ON OL ASR	264110.09	0800609.29	1A	97		78	302 0	2500
BUSH	264035.96	0800521.35	1A	40		21	140 21	3119
OL ON LIGHTED WINDSOCK	264047.96	0800618.64	1A	41		22	254 46	3229
ANTENNA ON OL MICROWAVE T	264025.23	0800540.12	2A	161		142	176 16	3377
ROD ON TOWER	264130.98	0800556.01	1A	180		161	346 55	3439
TREE	264029.16	0800517.32	1A	60		41	143 25	3875
TREE	264035.74	0800509.48	1A	59		40	129 10	3951
GROUND	264104.75	0800629.00	1A	38		19	282 57	4043
OL ON LIGHTED WINDSOCK	264130.87	0800611.16	1A	42		23	327 55	4048
TREE	264107.58	0800631.18	1A	108		89	286 18	4291
TREE	264105.84	0800632.86	1A	78		59	283 39	4406
TREE	264024.74	0800512.00	1A	64		45	142 25	4528
TREE	264030.60	0800501.52	1A	82		63	129 14	4840
OL ON HANGAR	264044.46	0800439.54	1A	75		56	107 7	6102
ANTENNA	264144.67	0800643.30	1A	98		79	315 16	7057
OL ON BUILDING	264129.80	0800435.39	1B	172		153	67 7	7065
TREE	264145.72	0800645.58	1A	105		86	314 49	7283
ANTENNA ON BUILDING	264039.15	0800421.20	1A	134		115	108 8	7845
ANTENNA	264115.16	0800413.48	1B	113		94	82 16	8472
ANTENNA	264121.59	0800409.97	1B	147		128	78 35	8933
RADIO MAST	264147.96	0800352.68	2A	174		155	67 38	11351
OL ANTENNA	264215.77	0800347.73	1B	184		165	57 29	13198
ANTENNA	264119.30	0800319.67	1B	169		150	84 41	13350
OL RADIO MAST	263829.70	0800507.12	2A	266	256	247	170 54	15401
OL RADIO MAST	263828.68	0800509.69	2A	267	258	248	171 50	15452
OL RADIO MAST	263827.52	0800512.24	2A	286	277	267	172 45	15521
ANTENNA ON BUILDING	264157.61	0800304.69	2C	307	297	288	71 26	15722
OL ON BUILDING	264229.57	0800306.49	2C	358	351	339	61 9	17072



TOUCHDOWN ZONE RUNWAY	ELEVATION
9L	17
27R	19
9R	19
27L	18
13	19
31	17

PALM BEACH INTERNATIONAL AIRPORT

WEST PALM BEACH, FLORIDA

(NOT TO SCALE)